

Changes in Returns to Task-Specific Skills and Gender Wage Gap

Shintaro Yamaguchi*

January 6, 2014

Abstract

How did skilled-biased technological change affect wage inequality, particularly between men and women? To answer that question this paper constructs a task-based Roy model in which workers possess a bundle of basic skills, and occupations are characterized as a bundle of basic tasks. The model is estimated using the task data from the Dictionary of Occupational Titles and the PSID. The main empirical finding is that men have more motor skills than women, but the returns to motor skills have dropped significantly, accounting for well over half of the narrowing gender wage gap.

Keywords: Roy model, task approach, occupational choice, skill-biased technological change.

JEL Codes: J24, J31

*Department of Economics, McMaster University, 1280 Main St. W., Hamilton, ON. Canada L8S 4M4. Email: yamtarom@mcmaster.ca. Website: socserv.mcmaster.ca/yamtarom. I am grateful to comments from John Jones, John Kennan, Fabian Lange, Ronni Pavan, Craig Riddell, Chris Robinson, Paul Sullivan, and other participants of the seminars and conferences at ASSA, Calgary, Hitotsubashi, Manitoba, McGill, Montreal, Ryerson, SOLE, Tokyo, Toronto, Washington Univ. in St. Louis, Western Ontario, and Wisconsin. The use of SHARCNET computational facilities is gratefully acknowledged.